

REMARKS

Claims 1 to 29 are pending in the application. The Examiner has subjected the claims to an election of species requirement and claims 4, 5, 15, 18, and 19 have been withdrawn from consideration. The abstract of the disclosure has been objected to because it does not recite any process steps. The title of the invention has been objected to for not being descriptive. The Examiner has requested that the trademarks in the specification be capitalized. Claim 2 has been objected to as being of improper dependent form. Claims 1 to 3, 6 to 9, 16, 17, and 22 to 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Peeters et al. (U.S. Patent 6,328,409) in view of JP 03-100561. Claims 10 to 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Peeters et al. in view of JP 03-100561 and further in view of Patel et al. (U.S. Patent 5,403,693). Claims 20 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Peeters et al. in view of JP 03-100561 and further in view of Sacripante et al. (U.S. Patent 5,348,832).

Applicants have amended the Abstract and the Title as indicated and believe that these amendments eliminate any possible basis for objection thereto by the Examiner. Similarly, while the known trademarks in the specification have already been identified by indications such as "@", to facilitate prosecution, Applicants have amended the specification as indicated to capitalize trademarks.

Applicants have amended claim 2 as indicated, and believe that this amendment eliminates the basis for objection thereto.

Applicants respectfully traverse the rejections of claims 1 to 3, 6 to 9, 16, 17, and 22 to 29 under §103 as being unpatentable over Peeters et al. in view of JP 03-100561. Peeters et al. is directed to a ballistic aerosol marking apparatus. As the Examiner has stated, nothing in this reference teaches or suggests the use therein of a particulate marking material comprising toner particles which comprise a polyester resin, an optional colorant, and polypyrrole, said toner particles having an average particle diameter of no more than about 10 microns and a particle size distribution of GSD equal to no more than about 1.25, wherein said toner particles are prepared by an emulsion aggregation process, said toner particles having an average bulk conductivity of at least about 10^{-11} Siemens per centimeter.

Japanese Patent 3-100561 discloses an electrophotographic toner characterized in that a conductive high polymer, such as polymers of aniline, pyrrole, thiophene, or derivatives thereof, is adhered to the surface of the core substance that forms the toner. The Examiner has pointed to nothing in this reference that teaches or suggests to one of ordinary skill in the art that it would be desirable to prepare a toner containing a polypyrrole by an emulsion aggregation process.

One of ordinary skill in the art would have no motivation to combine the teachings of these references. JP 3-100561 is directed to an electrophotographic toner. The Examiner has pointed to nothing in the teachings of this reference that would suggest to one of ordinary skill in the art that it would be desirable to use a marking material as disclosed therein in a ballistic aerosol marking device. Neither of the

cited references suggests or teaches the desirability of combining the elements of the present invention as claimed. Obviousness cannot be established by combining references to arrive at the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In re Geiger, 2 U.S.P.Q. 2d 1276 (Fed. Cir. 1987); Carella v. Starlight Archery and Pro Line Co., 804 F.2d 135, 231 U.S.P.Q. 644 (Fed. Cir. 1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. (BNA) 929 (Fed. Cir. 1984). When determining patentability under §103, the Examiner must consider the invention as a whole, and cannot view each element of the claim separately with respect to the prior art. See, e.g., Jones v. Hardy, ___ F.2d ___, 220 U.S.P.Q. 1021 (BNA) (Fed. Cir. 1984). When prior art references require selective combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself. Uniroyal Inc. v. Rudkin Wiley Corp., ___ F. 2d ___, 5 U.S.P.Q. 2d 1435 (Fed. Cir. 1988); Interconnect Planning Corp. v. Feil, 774 F. 2d 1132, 227 U.S.P.Q. 543 (Fed. Cir. 1985). It is impermissible to use the claims as a frame and the prior art references as a mosaic to piece together a facsimile of the claimed invention. Uniroyal Inc. v. Rudkin Wiley Corp., ___ F. 2d ___, 5 U.S.P.Q. 2d 1435 (Fed. Cir. 1988); W. L. Gore and Associates, Inc. v. Garlock, Inc., 721 F. 2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983). See also In re Clay, 966 F.2d 656, 23 U.S.P.Q. 2d 1058 (Fed. Cir. 1992); Ex Parte Levengood, 28 U.S.P.Q. 2d 1300 (Bd. Pat. App. & Int. 1993); In re Laskowski, 871 F.2d 115, 10 U.S.P.Q.2d 1397 (Fed. Cir. 1989); Yamanouchi Pharmaceutical Co. v. Danbury Pharmacal Inc., 56 U.S.P.Q. 2d 1641 (Fed. Cir. 2000).

In addition, even if these references were combined as suggested by the Examiner, neither reference teaches or suggests the preparation of a marking material by an emulsion aggregation process. Accordingly, even if these references were combined as suggested, one of ordinary skill in the art would not arrive at the instant invention. Accordingly, Applicants are of the position that the present invention as recited in claims 1 to 3, 6 to 9, 16, 17, and 22 to 29 is patentable with respect to the teachings of these references.

In addition, Applicants point out that Japanese Patent 3-100561 teaches a toner having a high polymer adhered to the surface of the core. Nothing in this reference teaches or suggests a toner as recited in claim 17, comprising particles of a resin and an optional colorant, said toner particles having coated thereon a polypyrrole, said polypyrrole having no more than about 100 repeat monomer units. Accordingly, Applicants are of the position that this claim is particularly patentable with respect to the teachings of this reference.

The Examiner has also rejected claims 10 to 14 as being unpatentable over Peeters et al. in view of JP 03-100561 and further in view of Patel et al. Patel et al. discloses a process for the preparation of toner compositions with controlled particle size comprising: (i) preparing a pigment dispersion in water, which dispersion comprises a pigment, an ionic surfactant in amounts of from about 0.5 to about 10 percent by weight of water, and an optional charge control agent; (ii) shearing the pigment dispersion with a latex mixture comprising a counterionic surfactant with a charge polarity of opposite sign to that of said ionic surfactant, a nonionic surfactant, and resin particles, thereby causing a

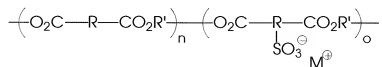
flocculation or heterocoagulation of the formed particles of pigment, resin, and charge control agent; (iii) stirring the resulting sheared viscous mixture of (ii) at from about 300 to about 1,000 revolutions per minute to form electrostatically bound substantially stable toner size aggregates with a narrow particle size distribution; (iv) reducing the stirring speed in (iii) to from about 100 to about 600 revolutions per minute, and subsequently adding further anionic or nonionic surfactant in the range of from about 0.1 to about 10 percent by weight of water to control, prevent, or minimize further growth or enlargement of the particles in the coalescence step (iii); and (v) heating and coalescing from about 5 to about 50°C above about the resin glass transition temperature, T_g, which resin T_g is from between about 45°C to about 90°C and preferably from between about 50°C and about 80°C the statically bound aggregated particles to form said toner composition comprised of resin, pigment and optional charge control agent.

The Examiner has applied this reference as teaching the specific emulsion aggregation process recited in claims 10 through 14, and is of the position that this combination of references renders obvious these claims.

Applicants disagree with this position for the reasons set forth hereinabove with respect to the rejection of claims 1 to 3, 6 to 9, 16, 17, and 22 to 29. More specifically, one of ordinary skill in the art would have no reason to consider these references in combination, and would have no reason to believe that it would be desirable to use these electrophotographic toner materials in a ballistic aerosol marking process. Accordingly, Applicants are of the position that the present

invention as recited in claims 10 through 14 is patentable with respect to these references.

The Examiner has also rejected claims 20 and 21 under §103 as being unpatentable over Peeters et al. in view of JP 03-100561 and further in view of Sacripante et al. Sacripante et al. discloses a toner composition comprising pigment and a sulfonated polyester of the formula or as essentially represented by the formula



wherein M is an ion independently selected from the group consisting of hydrogen, ammonium, an alkali metal ion, an alkaline earth metal ion, and a metal ion, R is independently selected from the group consisting of aryl and alkyl, R' is independently selected from the group consisting of alkyl and oxyalkylene, n and o represent random segments, and the sum of n and o are equal to 100 mole percent.

The Examiner has applied this reference as teaching a toner teaching a polyester coated with the claimed polypyrrole, and is of the position that this combination of references renders obvious the present invention as recited in claims 20 and 21.


Applicants disagree with this position for the reasons set forth hereinabove with respect to the rejection of claims 1 to 3, 6 to 9, 16, 17, and 22 to 29. More specifically, one of ordinary skill in the art would have no reason to consider these references in combination, and would have no reason to believe that it would be desirable to use these

electrophotographic toner materials in a ballistic aerosol marking process. Accordingly, Applicants are of the position that the present invention as recited in claims 20 and 21 is patentable with respect to these references.

Applicants believe that the foregoing amendments and distinctions place the claims in condition for allowance, and accordingly respectfully request reconsideration and withdrawal of all grounds for rejection.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby authorized to call Applicant(s) attorney, Judith L. Byorick, at Telephone Number (585) 423-4564, Rochester, New York.

Respectfully submitted,



Judith L. Byorick
Attorney for Applicant(s)
Registration No. 32,606
(585) 423-4564

JLB/cw
June 14, 2006

Xerox Corporation
Xerox Square 20A
Rochester, New York 14644